

HSD3B1 Protein, Human, Recombinant (His & Myc)

General Information

Synonyms:	HSD3B1;Delta-5-3-ketosteroid isomerase;Dihydrotestosterone oxidoreductase;3BH;Trophoblast antigen FDO161G;3-beta-hydroxysteroid 3-dehydrogenase;3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type I (3-beta-HSD I);3-beta-hydroxy-5-ene steroid dehydrogenase;3-beta-hydroxy-Delta(5)-steroid dehydrogenase;3 beta-hydroxysteroid dehydrogenase/Delta 5-->4-isomerase type 1;HSDB3A;Steroid Delta-isomerase
Protein Construction:	2-237 aa
Species:	Human
Expression Host:	E. coli
Accession:	P14060
Molecular Weight:	33.4 kDa (predicted)
AA Sequence:	TGWSCLVTGAGGFLGQRIIRLLVKEKELKEIRVLDKAFGPPELREEFSKLQNKTKLTVLEGDILDEPFLKRACQDVS VIIHTACIIDVFGVTHRESIMNVNVKGTQLLLEACVQASVPVFIYTSSIEVAGPNSYKEIIQNGHEEEPLENTWPA PYPHSHKLAEKAVLAANGWNLKNGGTLTYCALRPMYIYGEGRFLSASINEALNNGILSSVGKFSTVNPVYV GNVAWAHILAL

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μg/mL. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

A bifunctional enzyme responsible for the oxidation and isomerization of 3beta-hydroxy-Delta(5)-steroid precursors to 3-oxo-Delta(4)-steroids, an essential step in steroid hormone biosynthesis. Specifically catalyzes the conversion of pregnenolone to progesterone, 17alpha-hydroxypregnenolone to 17alpha-hydroxyprogesterone, dehydroepiandrosterone (DHEA) to 4-androstenedione, and androstenediol to testosterone. Additionally, catalyzes the interconversion between 3beta-hydroxy and 3-oxo-5alpha-androstane steroids controlling the bioavailability of the active forms. Specifically converts dihydrotestosterone to its inactive form 5alpha-androstenediol, that does not bind androgen receptor/AR. Also converts androstenedione, a precursor of testosterone and estrone, to epiandrosterone. Expected to use NAD(+) as preferred electron donor for the 3beta-hydroxy-steroid dehydrogenase activity and NADPH for the 3-ketosteroid reductase activity.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481